

**ABSTRACT OF THE DISCLOSURE**

A method and apparatus for controlling traffic loading on a cable modem termination system helps provide viable quality of service (QoS) capability on a cable data system. Available data bandwidth on a particular channel is first determined, followed by a comparison of the amount of bandwidth requested by, or required by a new subscriber. If the bandwidth available on a particular channel is adequate, service can be provided on the channel, otherwise the new subscriber is assigned to a new channel to avoid data overload.